

COCKERMOUTH
Rural District Council.

Annual Report

OF THE
MEDICAL OFFICER OF HEALTH,
JOHN PENNY, D.Sc., M.B., F.R.S.E.
FOR THE YEAR 1910.

Together with the Summary of Work
of the Inspector.

COCKERMOUTH :
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COCKERMOUTH RURAL DISTRICT.

TO THE CHAIRMAN AND MEMBERS OF THE
RURAL DISTRICT COUNCIL.

Gentlemen,

I beg to present my Annual Report for the year 1910, the fourth that I have had the privilege of preparing.

This (1911) is a Census Year, and the estimated population of the district for several years past is probably incorrect owing to emigration, caused by the stoppage of some of the collieries in the neighbourhood, also the good class farm servants, etc., going abroad.

So far, the mortality figures for 1910 are unfavourable, both, as regards the general death rate and the infantile mortality. The latter is a more exact figure as it is not based upon the population of the district.

The incidence of infectious diseases has been of a very unsatisfactory character, especially as regards scarlet fever which is largely due to inadequate hospital accommodation, and diphtheria, spread through children attending one or two schools.

One of the features of the year has been the number of Orders and Regulations, accompanied by circulars and memoranda issued by the Local Government Board, to all of which the attention of the Council has been drawn.

Apart from the usual Memorandum as to Annual Reports, these include the Sanitary Officer's (Outside London Order 1910); The County Medical Officers of Health (Duties) Order, 1910; the Housing Town, Planning, etc., Act 1909, procedure Regulations; Regulations as to Plague; the Diphtheria Antitoxin (outside London) Order 1910; and the Housing (Inspection of District) Regulations, 1910.

The new order as to the duties of the Medical Officers of Health and Inspector of Nuisances throws increased work, especially of a clerical nature, on these officers, and will amongst things add to the bulk of annual reports.

Re the circular letter issued in December the attention of your Council re the amalgamation of Medical Officer of Health for two or more districts with those of Medical Officer to Workhouse and a District parish, etc. was drawn thereto, and for this area could easily and satisfactorily be put into force if the expenses incurred were not so seriously considered, and later this will, in my opinion, follow compulsorily.

The regulations as to Town planning are of special importance to certain parts of your district, which depend for their future prosperity upon the attractions of the district presented to visitors and residents. No opportunity for a town planning scheme has arisen during the year, but the Council will make a great mistake if they allow any estate to be developed without an effort to control the lines on which it is laid out.

Among other matters which medical officers of health are required to include in their Annual Reports, are "the influences affecting or threatening to affect injuriously the public health in the district, and on the action which may still be needed to combat with these influences."

No district is perfect in this respect.

Perhaps in this connection I might draw the Council's special attention to the paragraph on milk supply and more particularly to the question of the veterinary inspection of cattle.

Another matter which will probably thrust itself forward in the early future is the provision of some kind of sanatorium treatment for cases of phthisis.

The following is a statistical summary of the birth and death rates for the year under review as compared with the rates for England and Wales during the same period.

Rates calculated per 1000 of the population. :—

	For 1910	England & Wales	
		1910	1909
Birth Rate	26.9	24.8	25.6
Corrected Death rate	15.73	13.4	14.5
*Infantile Mortality	110	106	109
Zymotic Death rate	1.43	0.99	1.12
Phthisis Death rate	1.03	—	1.081
Cancer Death rate	0.85	—	.952

* Note :—These figures are per 1000 births and not per 1000 of the population.

In conclusion I wish to express my indebtedness to G. S. Wilson, Esq., Broughton Grange, for furnishing me with the rainfall report for the year 1910, (which is so useful for future reference), and which is included amongst the tables annexed to this report, and also to record my thanks to the Clerk, the Inspector of Nuisances, other officials and the members of the Council for their kindness and generous support throughout the year.

I have the honour to be, Gentlemen,

Your obedient servant,

JOHN PENNY.

REPORT.

The area of the district in statute acres (exclusive of area covered by water) is 158,113.464.

Area

The district presents a great diversity of surface, as from its central position and extensive area it commands the most magnificent scenery, both mountain and lake, of any in the County of Cumberland. It extends from Threlkeld Granite Quarries to the Solway, near Allonby, and from Dunmail Raise to Distington. The drainage of the district is mainly accomplished by means of the river Derwent and its tributaries, the Greta, Bloomer, Cocker and Marron. The Derwent rises in Borrowdale and flows in a northerly direction into the southern end of Derwentwater, near Lodore. At Portinscale, Keswick, nearer the west, it leaves the lake and receives the water from the Greta (which has its source in Scales Tarn lying at the foot of a perpendicular rock on Saddleback), and into which St. John's beck discharges after flowing from lake Thirlmere through St. John's-in-the-Vale. Three miles northwest of Keswick the Derwent enters Bassenthwaite Lake, and after flowing through this extensive sheet of water leaves it at the opposite end near Ouse Bridge, where it continues its tortuous and picturesque course in a westerly and south-westerly direction to Isel to receive the water from a tributary (the Bloomer) draining the Bewaldeth district, after which it flows to Cockermouth where it is joined by the Cocker which drains the lakes of Buttermere, Crummock and Loweswater, through the Vale of Lorton, afterwards flowing in a westerly direction for about five miles to take the water from the Marron, and to continue its journey to the sea into which it discharges at Workington. Another river, the Ellen, which has its source in Overwater, partly forms the boundary on the north side between the Rural Districts of Cockermouth and Wigton, and eventually flows into the Solway, at Maryport.

Physical
Features

The principal industry is agriculture although a certain percentage work at the coalmines and quarries.

Chief Occupa-
tion of the
Inhabitants

Beneath the red marl of the western district coal is found. Appertaining to the Whitehaven coalfield some of the local seams extend for three or four miles under the sea. Collieries proceed along the coast past Harrington, Workington, Flimby, Broughton Moor, Maryport, and extend inland to Aspatria and Mealsgate.

Geology.

Limestone is abundant in many localities, and granite in some few districts. Slate of excellent quality is found at Borrowdale, and at the extensive quarries high up on Honister Craggs.

Climate

The climate is variable, as in the mountainous localities it is often wet and piercingly cold, while the lowlands possess a mild temperature. The prevailing winds are from south-west and being charged with moisture discharge a heavy rainfall.

Plans

Plans for new buildings, &c. approved during 1910.

PARISH.	New buildings (houses).	Addi- tions.	Stables, Farm Build- ings, etc.
Birkby ...			Water clos't & bathr'm
Brackenthwaite ...			Farmyard buildin's, &c
Branthwaite ...			Byre
Br dgefoot ...			Addition to chapel
Buttermere ...		1	
Camerton ...	1		
Crosby ...		1	
Dean ...			Lavatory at school
Embleton ...		1	
Flimby ...	10		Laboratory
Gilerux ...			New byres
Grange ...	1		
Great Broughton ...	1		
Great Clifton ...	1		
Oughterside ...	1		Bathroom
Plumbland ...			New privies
Portinscale ...			Stables
Seaton ...	8		
St. John's ...		1	
Setmurthy ...	1		
Thornthwaite ...			Shop
Wythburn ...			Stable
Wythop ...			New sanitary arrange- m'ts at Bass. Lake Stn.

Population

According to the 1901 census the population of the district was 21,690.

The estimated population—22,250 upon which all these statistics is based, is for the whole district.

Birth Rate

There were registered throughout the entire district 600 births (294 males and 306 females) and of these 29 (16 males and 13 females) were illegitimate. The rate for the year was 26·96 and is lowest for the last ten years the average of which was 29·2 per 1000 of the population. The highest rate was recorded in 1901 (31·3 per 1000).

The percentage of illegitimate to total births is 4·8 as compared with 4·7 the rate for 1909.

The birth rate for England and Wales for 1910 was 24·8.

The deaths actually registered in the district were 333 or 51 more than 1909, and 23 more than the average for the previous ten years, and the death rate from this uncorrected figure would be 14.96 per 1000 living. To get anything like a correct death rate various additions and deductions must be made. On one hand there are no less than 18 deaths to be added since this number of persons who belonged to the district died in the Cockermouth Workhouse, Cumberland Infirmary, Maryport Cottage Hospital, Cockermouth Nursing Home, and the County Asylum at Garlands, and one deducted who died at the Isolation Hospital, Broughton Moor.

Death rate from
all causes

We then get the approximate number of deaths to be 350 which gives a death rate of 15.73 per 1000. The rate for 1909 was 13.57. The average for the ten years 1900—1909 was 14.0

The corrected death rate for England and Wales for 1910 was 13.4 per 1000.

One hundred and twenty is the number of persons who had attained the age of 65 years and upwards, which gives a senile death rate of 34.2 per cent of the total deaths against 32.11 per cent for 1909.

Senile death
rate

The following table gives the age at death. —

Year.	At all Ages.	Under 1 yr.	1-5	5-15	15-25	25-65	65 upwards
1910	350	66	48	17	14	85	120
1909	302	62	14	11	15	93	107
1908	369	103	32	13	26	97	98
1907	356	74	20	10	12	102	138
1906	309	77	23	9	17	85	98
1905	337	90	39	12	17	76	103
1904	298	88	33	7	11	76	83
1903	314	76	13	11	15	82	117
1902	293	77	21	11	14	76	94
1901	322	84	37	10	10	88	93

The above figures show a decrease of one between fifteen and twenty-five, and eight between twenty-five and sixty-five; and an increase of four under one, thirty-four under five, six under fifteen and thirteen over sixty-five years and upwards.

During the year sixteen inquests were held.

Inquests

The number of uncertified deaths was twelve.

Uncertified
Deaths

Infantile Mortality

There were 66 deaths among infants under one year of age. This shows an increase of four on last year's figures. The average number of deaths for the ten years, 1900—1909 was 125 per 1000 registered births. This is the second lowest recorded during the past eleven years, the figure being 110

The rates for the past ten years are as follows :—

1910	1909	1908	1907	1906	1905	1904	1903	1902	1901
110	92	172	117	120	147	136	114	123	123

Table V shows the causes of death among infants.

Notification of Births Act

This Act has not been adopted by this Council.

Midwives' Act, 1902

The working of this Act is administered by a Committee of the County Council, and I am appointed their local inspector.

There are nine registered Midwives in the District. These have been regularly visited at their homes, their register of cases and bags of appliances inspected, and quarterly reports of such inspections forwarded to the County Medical Officer of Health.

Cancer rate

Cancer proved fatal in nineteen cases with a rate of 0.85 per 1,000 of the population as compared with 0.94 per 1,000 in the preceding year.

Number of deaths each year from Cancer.

1910.	1909.	1908.	1907.	1906	1905.	1904.	1903.	1902.	1901
19	21	26	20	17	15	17	19	9	12

Tuberculosis Phthisis

There were 23 deaths registered as being due to phthisis. Besides the above, seven deaths were assigned to other forms of tubercular diseases. The following table gives the age at death :—

YEAR.	At all ages.	Under 1 year.	1-5	5-15	15-25.	25-65.	Over 65.
1910	23			3	3	14	3
1909	18			1	4	11	2
1908	8			1	3	4	
1907	21				2	17	2
1906	16			3	6	7	
1905	14		1	1	4	8	
1904	13			1	2	9	1
1903	11			1	4	6	
1902	13			3	2	6	2
1901	12				1	10	1

The death rate from consumption is equal to 1·03 per 1,000 of the population. That for 1909 was 0·8 per 1,000.

Pulmonary Tuberculosis is not notifiable in the district and during the year one case of a female aged 43 years, was notified in December, under "The Public Health (Tuberculosis) Regulation, 1908."

Tuberculosis in its various forms has for many years been known to be associated with insanitary surroundings, and bad conditions of life. Dwellings in courts and alleys—often dark, damp and dirty and so constructed that foul and foetid atmosphere takes the place of sunlight and pure air—are the breeding places of tuberculosis—and conditions approximating to these, whether of the home, the school, the workshop, or place of business favours its growth and spread, and it is with conditions such as these that its prevalence is notorious. Poverty, intemperance, ill-feeding, prejudicial habits, occupation, anything in fact which tends to debilitate or to lower the constitution increases the susceptibility to the disease.

A minute micro-organism, which at certain stages of the disease is given off by the consumptive patient, usually from the lungs, and under the conditions described, is capable of transmitting the disease to the healthy. It is also capable of being transmitted in quite another way, namely, from animals to man, more especially through the milk of a tuberculous cow; indeed some eminent experts regard this latter as of more importance as a source of infection than the communicability from person to person; the safest course is to recognise the danger of each.

It is the close, dark, dirty, ill-ventilated and overcrowded cowshed which favours the disease in the cow just as similar surroundings favour it in the human being. The liability of transmission from person to person is variable and is affected by various conditions: in early stages of phthisis and in tuberculosis of internal organs other than the lungs the risk is small, if any, but when there is copious expectoration large quantities of the tubercle bacillus may be discharged which may be dispersed in the act of coughing or sneezing, and inhaled or swallowed by others. A careless patient in bad surroundings may easily become a source of danger.

The susceptibility of the individual who inhales or swallows the bacilli varies: constitutional predisposition, the habits, the occupation, the intemperance of the exposed person may prepare the way for it. In numberless cases the likelihood is that the bacillus is swallowed or inhaled without any ill effect.

It will be seen, therefore, that the consumptive patient must not be always and under all circumstances regarded as a source of danger to others.

Dr. Miles Arnold of the Manchester Health Department, in a lecture, spoke of the gospel of the "*Open window*" "He even thought it was a pity that air did not get distinctly discoloured like water, as in the case of water air got dirty, but unfortunately people did not see it, and some inclined and even found wishful to use the same air over and over again. That was as great a mistake as washing the face with dirty water. People had an extraordinary custom of opening the window when the occupants left the room and closing the windows when they went into the room, the reverse should be the case. In bedrooms there was no excuse for keeping the windows closed. People went about the streets all day with their faces and necks exposed to the air, but it was an extraordinary thing that practically everybody was afraid to have the bedroom windows open when they got into bed and had the whole of their bodies covered with warm clothing with the exception of the face and neck. There was no possible reason why the windows should not be wide open and they would feel very much better as a consequence."

With the above remarks I quite agree but unfortunately our climatic conditions render it necessary that some window should be devised whereby the storm and rain cannot blow in yet at the same time the full maximum of fresh air be obtained.

The Zymotic
Death rate

The Zymotic Death Rate is calculated from the number of deaths due to the seven principal zymotic diseases. The following table gives them and the deaths recorded from each :—

Smallpox	...	...	...	...	0
Measles	...	...	...	...	13
Whooping Cough	...	...	...	...	2
Diphtheria and Membranous Croup	...	...	...	...	2
Scarlet Fever	...	...	...	...	9
Fever	{ Typhus	...	...	...	0
	{ Enteric	...	...	...	1
	{ Continued	...	...	...	0
Diarrhœa	...	...	...	...	5
Total					32

The zymotic death rate for the year is equal to 1·43 per 1,000 of the estimated population as compared with 0·58 per 1,000 in 1909. The rate for England and Wales for 1910 was 0·99 per 1,000.

No case was notified during the year.

Smallpox

A public enquiry was held in the Carnegie Free Library, Workington, under the presidency of E. P. Manby, Esq., M.D., a medical inspector of the Local Government Board, at 11-15 a.m. on the 12th July, 1910, with reference to an application for sanction to borrow £3,500 for the purchase of about 30 acres of ground and erection of a small-pox hospital in the Parish of Camerton, for the Joint Smallpox Hospital Board. After the enquiry the site was visited and it was found to conform to the requirements laid down in the memorandum of the Local Government Board for such institutions.

Under the Infectious Diseases (Notification) Act, 1889, two hundred and thirty-three cases of infectious diseases were notified during the year, or ninety-three more than in 1909. The following table gives the number of notifications during each month of 1910.

Notifiable Zymotic Diseases

MONTHLY NOTIFICATIONS.

1910.	Smallpox	Diphtheria	Enteric Fever	Puerperal Fever	Scarlet Fever	Erysipelas	TOTAL
January	10	1	11
February	1	..	22	..	24
March	2	..	8	2	12
April	2	..	8	1	11
May	1	..	6	1	8
June	1	7	1	9
July	20	..	20
August	1	..	31	1	33
September	26	..	26
October	12	..	18	5	35
November	4	..	19	3	26
December	1	..	15	2	18
TOTAL	24	20	..	190	17 233

From these diseases there were fourteen deaths, viz. :—Diphtheria, two ; Erysipelas, two ; Enteric Fever, one ; and Scarlet Fever, nine.

The next table shows how these Infectious Diseases notified were distributed.

DISTRICT.				Diphtheria	Enteric Fever	Puerperal Fever	Scarlet Fever	Erysipelas.	TOTALS.
(a) KESWICK RURAL.									
	Portinscale	...	...	1	...	...	...	...	1
	Rosthwaite	...	...	...	...	...	...	1	1
	Threlkeld	...	...	...	...	...	1	...	1
				1	...	...	1	1	3
(b) COCKERMOUTH RURAL.									
	Blinderake	...	...	...	...	...	1	...	1
	Blindbothel	...	...	...	...	...	...	1	1
	Bridekirk	...	...	...	...	...	1	...	1
	Eaglesfield	...	...	...	...	...	...	1	1
	Great Broughton	...	...	...	...	...	1	...	1
	Greysouthen	...	...	...	...	...	1	1	2
	Isel	...	...	...	...	...	1	...	1
	Redmain	...	...	...	...	...	3	...	3
	Setmurthy	...	...	12	...	...	...	...	12
	Sunderland	...	...	...	...	...	1	...	1
	Tallentire	...	...	...	...	...	4	...	4
	Wythop	...	...	3	...	...	...	...	3
				15	...	...	13	3	31
(c) WORKINGTON RURAL.									
	Branthwaite	...	...	...	...	...	1	2	3
	Bridgefoot	...	...	...	...	...	5	...	5
	Camerton	...	...	...	...	...	12	...	12
	Great Clifton	...	...	...	1	...	46	3	50
	Little Clifton	...	...	...	...	...	8	...	8
	Seaton	...	...	...	...	...	4	4	8
	Stainburn	...	...	...	1	...	4	...	5
				...	2	...	80	9	91
(d) MARYPORT RURAL.									
	Arkleby	...	...	...	...	...	2	...	2
	Birkby	...	...	...	...	...	3	...	3
	Bothel	...	...	...	...	...	1	...	1
	Broughton Moor	...	...	...	...	...	2	1	3
	Bullgill	...	...	...	...	...	1	...	1
	Crosby	...	...	...	...	...	...	2	2
	Dearham	...	...	...	...	...	38	...	38
	Flimby	...	...	3	...	...	38	...	41
	Gilcrux	...	...	...	...	...	2	1	3
	Parsonby	...	...	...	...	...	3	...	3
	Plumbland	...	...	3	...	...	5	...	8
	Oughterside	...	...	2	...	...	1	...	3
				8	...	...	96	4	108

The following Table shows the number of notifications for the past five years :—

DISEASES.		1910	1909	1908	1907	1906
Smallpox	...	...	...	...	...	...
Diphtheria and	} Membranous Croup	...	...	...	...	...
Enteric Fever		24	36	18	19	17
Puerperal Fever	...	2	4	15	9	5
Scarlet Fever	...	...	...	1	...	...
Erysipelas	...	190	86	58	61	205
	...	17	14	12	9	12
Totals		233	140	104	98	239

STEPS TO TAKE TO PREVENT INFECTIOUS DISEASES.

No one who has not been engaged in public health work can have any idea as to the frequency with which slight attacks of scarlet fever and diphtheria are overlooked by parents. A child has a sore throat, with perhaps some sickness, and the glands of the neck become swollen. He is kept indoors for a day or two. If he gets obviously worse a medical practitioner is summoned on the third or fourth day; if the disease happens to be diphtheria of a severe type, the delay is too great for treatment to be of any benefit, and it is in this way that most of the fatal cases arise. If the child improves the parents conclude that it cannot possibly be diphtheria or scarlet fever, and in a week or so the child returns to school, the result generally resulting in the origin of an epidemic of some magnitude.

THE DIPHTHERIA ANTITOXIN (OUTSIDE LONDON) ORDER, 1910.

Diphtheria

The above Order allows local authorities to provide antitoxin for both curative and prophylactic purposes for the inhabitants of their districts (and to arrange for the necessary medical attendance in connection with the poorer classes therewith).

The serum has been supplied by the Council gratuitously for some time for both curative and prophylactic purposes, consequently no new arrangements were necessary on the issue of the Order as regards the provision of the serum.

On the receipt of a notification the house is visited as soon as possible, particulars as to the source of infection, milk supply, school attended, drainage, etc., obtained; and in cases of *scarlet fever* necessary arrangements made for the removal of the patient to the Isolation Hospital, Broughton Moor. The medical attendant generally answers *the special question on your notification form*:—"If the case is one of scarlet fever is the patient fit to be removed to the Fever Hospital?" a step which greatly facilitates their early removal.

After removal, or on recovery, should the patient be treated at home, the infected rooms and bedding are fumigated, and afterwards sprayed with formalin.

Postcards are left with the occupier of the infected house to be posted after medical attendant's signature is attached declaring the patient to be free from infection. These are then forwarded to the Inspector of Nuisances who carries out the disinfection of the premises.

Printed notices of section 126, P.H.A., 1875, along with printed instructions as to precautions to be taken for each of these infectious cases are left with each householder wherein a case occurs; also disinfectants are supplied free by your Council.

All the other children in an infected house are forbidden to attend school during the requisite quarantine period after the removal to the hospital of the sufferer, or after their convalescence when treated at home. Such instructions are also given with reference to the attending of public places and Sunday schools.

Where a day school is closed for an infectious disease I also ask the superintendents to close the Sunday schools, as the children who attend these do not correspond to the day schools, and the children belonging to the closed schools would probably attend Sunday school and so transfer the infection to children from other day schools.

The prevalence of diphtheria still continues, and during the year under review twenty-four cases were recorded, as against thirty-six, the number for 1909, with two fatal results.

A notification was received stating that a boy, aged nine years, residing at Plumbland, was suffering from this disease. Illness manifested itself on 25th February. This

was followed by a second notification stating that his father had contracted the same disease whilst nursing his son.

Adjoining this residence the drainage and ashpits were in an insanitary condition, and which have since been remedied.

A third notification was received in April, stating that a married woman, aged thirty-five years, was suffering from this malady. The sufferer had been at Curthwaite for a week, and three days later her illness commenced.

This case was in a two-roomed house, all on the same floor. The building suffers from damp, there are no drains for the down spout water which stands in pools along the base of the walls. In the immediate vicinity there is an objectionable roadside gutter.

At Prospect, Oughterside, a girl, aged eight years and eight months, was notified. Her illness began March 23rd. Was at school the same date. Source of infection not ascertainable.

On the 19th April, a brother of the last case, aged eleven years and six months, fell a sufferer to this disease.

On the 13th May a case of diphtheria was notified from the village of Flimby. Illness began on 8th May. He attended school. Had no visitors and had not been away from home. Whilst on the shore he got his feet wet and afterwards commenced with a sore throat. No insanitary conditions existed at his home.

Another case was notified from this village, in a married female, aged twenty-eight years. Illness began on the 4th August after her return from a visit to Whitehaven. She was also at Blackpool on July 22nd.

On the 8th October, a notification was received stating that a boy, residing at Portinscale, aged two years and five months, was suffering from this disease. Illness commenced on October 4th, but the parents thought it was croup, and the medical attendant was not called in until 7th October, when he administered antitoxin, but the child died the same night. The mother and child had been at Carlisle for a week and resided at a house where a girl suffered from a sore throat. Insanitary conditions were observed, viz. :--defective pavement around gully, and a choked roadside grating near the dwelling.

The bulk of this disease in this district commences with the next cases. Three notifications were received. (1) on 21st October, a boy, aged eleven years and six months, residing at a cottage at Bassenthwaite Lake Station. Illness began on 15th October. (2) His sister, twelve years and six months. Began on 18th October; and (3) her father, aged fifty-six years, began same date. During the preceding twelve months a case of this disease had been notified from this dwelling.

On investigation it was found that all the drainage was in a most insanitary condition— which has since been remedied by a new scheme.

This girl attended Setmurthy school, and in the next few days no fewer than twelve other cases were notified in this township, one of which proved fatal. The school was closed and thoroughly disinfected.

On 13th December a case was notified in a female, aged seven years, residing at Flimby. The sufferer attended school on the 9th December, and her illness commenced the same day. Where this patient resides the existing sanitary conditions are most unsatisfactory.

Enteric Fever

Two cases were notified during the year—one a boy aged 14 years 10 months, on the 5th February, 1910, residing at 16, Concrete Terrace, Great Clifton. His illness began on 31st January, 1910.

Here again is the same condition as stated in previous reports, the midden privies being incubators in this village to this disease. The second case was that of a male aged 35 years residing at Stainburn. Illness began on the 8th June, 1910. He complained of a foul odour whilst following his employment as a coalminer. This case ended fatally.

Scarlet Fever

During the year scarlet fever has been rife, particularly in the villages of Great Clifton (46); Dearham and Flimby (38 each); and Camerton (12). With regard to these outbreaks at Flimby, Dearham and Great Clifton the spread was undoubtedly caused first by the schools, and secondly inadequate hospital accommodation which necessitated a large number of cases to be treated in their homes. With reference to the outbreak at Great Clifton it appears to me so long as parents take

so little regard of the advice of the Sanitary Officials and do not attempt to obey the Public Health Act, 1875, section 126, then diseases of this type must become epidemic. On my visiting the infected houses what do you think of this for a list and the replies given to my questions?

A man working at the adjoining colliery came in to get his tea warmed and have his dinner in the room where the sufferer was. This man travels daily backwards and forwards to a large borough town some three miles distant. Another case a child who had been staying at another village came home that morning to an infected house and was in contact with the infected child. Her mother stated she was going to send her back that evening and was very indignant when I told her she must do nothing of the kind.

Many of the persons who were caught visiting these infected areas said "That they did not know it was fever and so long as they had no children it did not matter."

I think if the Public Health Act made provision for a label to be placed on an infected door, outside, with a heavy penalty for its removal by any person except the Sanitary Inspector after he had disinfected such building, then the public would know where infectious diseases were; and travellers, etc., would be chary, and the risk of conveying disease to other areas materially reduced.

During the month of October, 1910, a male, aged 22 years, was brought before the Workington Petty Sessions and fined 20s. including costs, for exposing himself whilst suffering from scarlet fever.

Nine of these cases ended fatally.

Eighty-four cases were removed to the Isolation Hospital, Broughton Moor.

The cases of scarlet fever occurred as follow :—

Two-roomed house, one case; three-roomed house, 50 cases; four-roomed house, 70; five-roomed house, 38; over five rooms, 21. Of houses with only one door there were 52; with through ventilation (back and front doors) 109. 20 cases occurred where there were three inmates in the house; 30 with four; 27 with five; 34 with six; 31 with seven; 22 with eight; four with nine; five with 10; two with 11; four with 12 and two with 13.

From the above figures it is easily seen the danger of leaving cases at their own homes and not removing the same to hospital when the first case arises therein.

The Isolation Hospital, at Broughton Moor contains 11 beds and four cots.

No steam disinfecter is provided either at this institution or in your district.

Puerperal
Fever

Not a single case was notified.

Erysipelas

Seventeen cases of Erysipelas were notified during the past year in different parts of the district. These, as well as all other cases of disease notified, were made the occasion of visits of inspection to ascertain the sanitary conditions of the premises where they occurred, but none were found to be associated with any insanitary conditions. All were due to chills.

Non-Notifiable
Diseases—
Measles

During the year 1910, measles has been the most important of the Infectious diseases which do not come under the provisions of the Infectious Diseases (Notification) Act. Epidemics at Lorton, Broughton, Great Clifton, Flimby, and Dearham have manifested themselves and account for no fewer than thirteen deaths. In the first village the school was closed, the infection being imported from Dearham. During the early part of the year many deaths were registered with measles as the primary cause and scarlatina as the secondary. It is an exceptional condition of affairs to have a mixed infection of two such maladies.

In February I visited, and with the mother's consent examined a boy at Dearham, who was peeling freely both on his hands and feet. The history was that the day following the Parliamentary election for this division the boy was out of sorts and vomited. On the Saturday night following, the sufferer was covered with a rash. His mother sent for her medical attendant who came next day and said the boy was suffering from measles. After my visit and informing her that in my opinion it was Scarlet Fever she sent for him again, and the next day I received a notification stating that this patient was suffering from Scarlet Fever and fit to be removed to the Hospital. I notified the School Medical Officer and we met in the village and examined the children attending the Schools.

On 7th February, 1910, a married woman called at my offices and asked if her daughter might return to school, as she had not been well since December but they had not had any medical practitioner in attendance as they thought it was measles, but she was peeling on her hands and feet. I told her to call in her own medical attendant which she did, with the result that the case was notified as one of Scarlet Fever. Many of these cases I am quite convinced which parents have taken for Measles have undoubtedly been cases of Scarlet Fever. Too much care cannot be exercised both by parents and medical men to discriminate between measles and scarlet fever when both diseases are in the district.

Whooping cough was very prevalent throughout the district during the year, and with two deaths, both under five years.

Whooping
Cough

This disease has been very troublesome amongst the children attending several of the schools in various villages.

Chickenpox

The Local Government Board's regulation as to Plague re the duties delegated to the Medical Officer of Health and Sanitary Inspector, was received.

Plague

Enquiries as to unusual mortality among rats, have yielded entirely negative results, though there are naturally large number of premises in the district infected by vermin.

Though these diseases, when occurring in man, are not notifiable, they come to our knowledge through the Police notices re animals affected with these diseases. No cases, fortunately, are to be recorded.

Anthrax and
Glanders

PLACES OVER WHICH THE COUNCIL HAVE SUPERVISION.

There are none in the district.

Common Lodg-
ing Houses

Twenty-five is the number in this Council's area. These have been frequently visited, but owing to their scattered situations it is impossible to keep satisfactory supervision over the animals slaughtered therein. The premises usually are, on inspection, found to be fairly clean.

Slaughter-
houses

No unsound meat of any kind has been seized.

Offensive
Trades

One tanyard situated at Stainburn. In many villages fish frying and chip potato businesses are carried on. These usually are in cottage houses without any suitable means of mitigating the effluvium nuisance rendered thereby.

Bakehouses

As respects every retail bakehouse the provisions of the part of the Factory and Workshops Act (Edward vii C. 22, 1901), shall be enforced by the District Council controlling their area in which the retail bakehouse is situate, and not by an Inspector, and for the purpose of this section the Medical Officer of Health of the District Council shall have and may exercise all the powers of entry, inspection, taking legal proceedings, and otherwise of an Inspector. In this section the expression "retail bakehouse" means any bakehouse or place, not being a factory, the bread, biscuits, or confectionery in which are sold, not wholesale but by retail, in some shop or place occupied with the bakehouse. Several cottagers and others follow the practice above stated.

None of the bakehouses have any machinery and only two where apprentices to the business are indentured.

Factories and
Workshops
Act

These have been frequently visited, and with two exceptions complied with the regulations of the Acts, written notices were given in both cases and one has not been remedied, viz. :—want of privy accommodation at Brick Works.

No home workers live in the district.

There are several cottages, where washing is done for one or more private families. One steam hand laundry at Ellengrove employs several hands, many of whom reside on the premises.

Cowsheds,
Dairies, etc.

The registered cowsheds, seventy in number, have been visited regularly. The condition of the floors and drainage is far from satisfactory the majority being "cobble-paved" and in consequence the ground beneath is permeated with sewage. The byres vary considerably in structural and other characteristics. Considerable improvement could be effected if regulations of a more specific character, and embracing among other things the surroundings of these buildings, could be made.

In any future legislation bearing on this subject it would be worthy of consideration to have an analysis of the water supply to the farmstead, when not on the public mains, prior to registration.

As I am aware, no systematic veterinary examination of the cattle is carried out at most of the farms.

There is not the slightest doubt that an appreciable proportion of the cows yield tuberculous milk, and that occasionally other disease producing organisms, derived from inflammatory conditions of the teats and udders, find their way into this important article of food.

Both these dangers can be reduced by a routine examination of the herds, and it can hardly be seriously questioned that sooner or later such examinations will have to be undertaken out of either the local or county rates. At present the statutory powers for dealing with cows affected with tuberculosis or other diseases of the udder, are extremely limited, but this shortcoming should not deter local authorities from undertaking the inspections, since pressure can be exerted in other ways.

Dr. Mapleton, M. O. H., Newton Rural District, expresses an opinion with which I fully concur:—"I wish the law was more definite. My idea is that the Local Government Board should lay down structural regulations, i.e., that the floors should be of concrete, walls impervious, ceilings sound and that the window area should bear a fixed relation to floor space; amongst other things no manure to be deposited within a fixed distance of the milking sheds. I think then that every cowkeeper should have a certificate signed by the M. O. H. and Sanitary Inspector, to the effect that all these structural matters are in accordance with the requirements of the Local Government Board; also that a list of those who have such certificates should be in the hands of the police, and that the latter should prosecute anyone selling milk without it. At present too much latitude is given to opinion."

Medical inspection of the school children in the Urban and Rural districts of Cumberland is made by the County Medical Officer of Health, who is also School Medical Officer, and his two assistants. Public Elementary Schools, etc

Re sanitary defects. Any noticed during the inspection of these premises by myself and the Inspector of Nuisances are duly brought before the Sanitary Committee.

At Wythop a new water supply (by gravitation) has been installed.

The closet accommodation at the following schools is far from perfect, viz. :—Brigham, Broughton, Bassenthwaite, Chapel Brow, Great Clifton, and Gilcrux.

The water supplies, generally, are satisfactory ; but in a few instances it is desirable to effect improvements especially Setmurthy, Paddle, and Isel.

The following eight schools were closed :—

Lorton	...	February	...	for Measles.
Plumbland	...	February	...	for Diphtheria.
Greysouthen	...	March	...	for Measles.
Gt. Broughton	...	May	...	for Measles.
Gt. Clifton	...	July	...	for Scarlet fever.
Chapel Brow	...	July	...	for Scarlet fever.
Setmurthy	...	October	...	for Diphtheria
Dearham	...	November	...	for Scarlet fever.

All the above were “voluntary closures” and not compulsory, under the powers of the Rural District Council. The procedure was that agreed upon at the Conference in December, 1909, of the Medical Officers of Health, of the Urban and Rural District Councils, with the Health Committee and School Medical Officer of the County Council, when it was decided : “that for the purpose of voluntary closing of schools, and for the exclusion of particular scholars, the District Medical Officer of Health be authorised to act immediately, and that the School Medical Officer will subsequently approve their immediate action.” Under this arrangement the District Medical Officer of Health can take into consideration the interests of the school and recommend its immediate closure on behalf of the School Medical Officer in cases in which he would not feel justified in advising compulsory closing by the District Council in the interests of the Public Health alone.

The power of compulsory closure by the Sanitary Authority, on the advice of the Medical Officer of Health of the District, is, of course, not affected by this arrangement, but will not require to be exercised very often. In many of these instances the schools were closed for short periods in order to have same thoroughly disinfected by spraying with formalin, and afterwards cleansed, instructions being specifically given that all window ledges, beams, cupboard tops, etc., be thoroughly washed with water containing some disinfectant.

In my opinion great benefit would be derived if all schools were thoroughly sprayed and cleansed at least three times a year. The initial cost would be more than repaid by the increased health of the scholars.

The Housing, Town Planning, etc., Act, 1909, came into force at the latter end of that year. Regulations were issued by the Local Government Board in September, 1910, and in December a conference of the County and District Medical Officers of Health of Cumberland, was held at Carlisle, to consider the best means of carrying out the provisions of the Act, and securing uniformity as far as possible in the methods employed in the different districts. This will entail a great deal of new work, but if the information thus obtained is duly considered and acted upon by the Council, much good may be expected. In fact this work has been accomplished in the past few years, but although records have been kept as to the conditions found, these have not been in the detail required by the Regulations, nor have they been indexed for future reference, and the difficulty in complying with the Regulations, lies in covering the wide and hilly area of which this district consists; the restricted facilities for gaining access thereto, and in accomplishing the clerical work as well. The initial visit to a cottage forms only a small portion of the work of inspection, since frequent visits have to be made subsequently, in order to ascertain if the improvements have been duly carried out by the owner or occupier as the case may be; and, moreover, full details of each cottage must be recorded, whether nuisances are found or not. This Council should consider the desirability of providing the Sanitary Inspector with a motor bicycle (as has been done by the Rural Councils of similar districts), and in this way the principal difficulty will be met.

Housing of
Working
Classes

The inspections themselves are carried out by the Sanitary Inspector, but from time to time I join him, in order to keep myself informed as to the general conditions that exist in the district.

Sanitation

During the year no less than 62 midden privies at Seaton have been converted into water closets owing to the new sewerage scheme.

On the 11th July, 1910, the Sanitary Committee along with myself and the Inspector of Nuisances visited the Goat, Papcastle, Belle Vue, and Dovenby, when a complete inspection of these districts re drainage was made. A report was submitted to the Council from this committee showing the serious pollution of the River Derwent by crude excremental matter from water closets and which are not provided with any system of sewage disposal.

The insanitary condition of Great Clifton still continues, irrespective of my repeated protests to have those foul stinking midden privies abolished which are, as stated in my annual report for 1907, "simply incubators of disease," and again emphasised in my annual report for 1909.

In my annual report for 1909, page 23, paragraphs three and four, *re* scavenging of Gt. Clifton and Flimby, nothing has been done *re* the collection of ashes bi-weekly, as recommended at that time.

At Eaglesfield an open gutter receives the drainage from byres, middensteads, etc., and runs down the side of the highway in the centre of the village. This nuisance could easily be abated by conveying the same drainage through underground sewer pipes.

Gaythorne Cottages, at Little Clifton, reported in 1909, have remedied the defects as regards proper moveable windows.

The drainage of Greysouthen received special note during the year and it was observed that at one area (the east end) it was somewhat insanitary. This nuisance results from heavy rainfalls causing the catchpits to overflow and which then gains access into a water course.

At Oughterside, a proper septic tank, etc., has been placed in to receive the outfall discharge from the previous existing sewer.

Complaints are still rife re the effluvium nuisance arising from cesspools in the village of Braithwaite, and this will not be remedied until the existing sewerage scheme is amended.

The keeping of pigeons, fowls, etc., in the backyards adjoining cottages is, in my opinion, a source of danger to the occupants of these ; (a) as diminishing the air space and (b) as such are looked upon as carriers and propagators of diphtheria, &c.

Some more rigid legislation is required on this ever increasing danger.

Overcrowding was detected—(a) at Flimby in a house consisting of kitchen, bedroom, and attic. The occupants were man, wife, a male lodger aged twenty-one years ; sons, nineteen, sixteen, fifteen, ten, and three years ; also two daughters, aged eleven years and six months respectively ; (b) at Dearham, a man, wife, four sons, aged fourteen, eleven, six, and four years ; and two daughters aged nine and two years respectively, occupied a house consisting of a kitchen and two bedrooms.

Overcrowding

With reference to the sewerage schemes for the villages of Great Clifton, Broughton, Broughton Moor, and Rosthwaite, plans have been prepared, but owing to difficulties arising re the outfalls for the two last-named villages these schemes have not been submitted to the Local Government Board for their enquiries. With regard to Braithwaite, Little Clifton (including Chapel Brow, &c.) Broughton Cross and Dearham nothing has yet been done, and the previous nuisances previously reported still continue.

Sewerage

The condition of the sewerage at Embleton remains the same although your Council have recommended a proper scheme to be prepared.

The drainage from Lime Kiln Inn, and other houses, discharges into private property. The attention of the Council has been frequently drawn thereto without any satisfactory result.

The rivers Cocker, Derwent, Ellen, Greta, Marron, and Bassenthwaite Lake, are all polluted by drainage from villages or mine washings.

Rivers Pollution Act

Rainfall

Rain fell on 202 days as compared with 196 in 1909. The rainfall for the year was 41·17 inches of which 6·12 inches fell in the month of February, followed by 5·32 inches in August. The least falls occurred in June, 1·51 inches, and September 0·91 inches. The average for the ten years, 1901—1910 was 40·22 inches, the heaviest record for any single year being in 1903, when 52·83 inches were registered, and the least in 1902, when only 29·20 inches were collected.

Water Supply

The public water supply derived from the Crummock Gravitation Main, throughout the area of supply, has been generally ample in quantity during the year, and has retained its good record for purity.

The supply to Oughterside, Crosby, Crosby Villa, and Crosscanonby from the Overwater Scheme, still continues as reported in my annual report of 1909, viz.:—its discoloration at times.

The villages of Dovenby, Dearham and Flimby are supplied with water from the river Derwent through the Maryport Water Scheme.

During the past year this main has been duplicated.

On page 27 of my annual report for 1908, particulars were detailed *re* the water supplies to Blindcrake, Redmain, Sunderland, Bassenthwaite, Grange-in-Borrowdale, and Applethwaite-under-Skiddaw, and which still remain *in statu quo*.

Seven samples of water were forwarded to the County Analyst, and examined during the year.

Appended are the reports.

1. Alms Houses Pump, Isel. The water is free from sewage contamination, but contains a small proportion of vegetable matter. At the time this sample was taken the proportion of vegetable matter was insufficient to render the water injurious, but this may not be so when the decay of vegetation is more active or the supply of pure water less. It would therefore be desirable, if at all feasible, that the well should be protected from infiltration from the adjacent boggy land with its stagnant water and decaying vegetable matter.

2 & 3. Hennah Hall and Green Trees Pumps. Both waters are so highly polluted as to be quite unfit for human use. The Hennah Hall sample is a specially bad one.

4. Queen's Head Inn, Bothel. The water is hard and shows evidence of sewage contamination. A purer supply is a necessity.

5. Laidlow's Pump, Oughterside. This is very highly polluted and dangerous water. It is quite unfit for human use. The well ought to be closed at once.

6. Embleton Station Pump. The analysis shows the water to be dangerously polluted.

7. Carter's Farm, Pardshaw. The water is polluted and is not fit for human use.

Twenty-eight houses have during the year had their water supplies improved. Sneckyeat Farm laid on a gravitation supply to replace a pump of doubtful purity.

Two houses at Redmain have had a good cistern supply put in and then conveyed a considerable distance by pipe.

Five houses at Ruddings are supplied by a windmill pump at a very considerable expense, drawing its supply from Bassenthwaite Lake into a filter bed and afterwards to this hamlet.

Annexed to this report are the usual Statistical Tables.

REGISTER OF RAINFALL IN 1910.

Kept at Broughton Grange, Cockermouth, in the County of
Cumberland, by G. S. WILSON.

Lat. 54 40 15. Long. 3 25 15 W.

Nearest Railway Station—Brigham.

Time of observation—9 a.m.

Diameter of Rain Gauge—5 in.

Height of top of Gauge above ground—1ft. 3ins.

" " " sea level—209ft.

NOTE.—Rain should be measured daily at 9 a.m., and the result entered to the previous day. Full instructions for the measurement of rain and particulars as to the British Rainfall Organisation are given in "*Rules for Rainfall Observers*," sent post free on application to Dr. H. R. MILL, 62, Camden Square, London, N.W.

RAINFALL IN 1910.

At Broughton Grange, Cockermouth, in the County of Cumberland.

Rain Gauge } Diameter of Funnel, 5in.
 } Height } Above Ground, 1ft. 3in.
 } of top } Above Sea Level, 209ft.

Month.	Total Depth.	Greatest fall in 24 hours.	Date.	Number of days with 'or or more recorded.
January	3'43	0'63	10th	20
February	6'12	0'70	20th	26
March	3'20	1'50	1st	13
April	2'49	0'48	12th	19
May	2'64	0'44	30th	16
June	1'51	0'38	24th	9
July	3'81	1'22	5th	15
August	5'32	0'83	18th & 28th	21
September	0'91	0'23	2nd	10
October	2'69	1'12	31st	12
November	4'23	1'06	11th	14
December	4'82	0'67	9th	27
TOTAL	41'17			202

If gauge has been moved during year state—
Date. Distance. Direction.
No.

How was height above sea level ascertained?
Ordnance Survey.

State pattern and maker of Gauge, if known?
Cassella.

What are the objects nearest to the Gauge?
Cabbages.

Nearest Parish Church and Railway Station.

NAME.	DISTANCE.	DIRECTION.
Church, Broughton	$\frac{1}{4}$ mile	W
Station, Brigham	$\frac{1}{2}$ mile	S E

RAINFALL AT BROUGHTON GRANGE, 1910.

Date	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	0'41	0'11	0.50	...	0'61	...	0'17	...	0'03	0'02	0'17	...
2	0'11	0'26	0'18	0'12	...	0'05	0'03	0'10	0'23	0'40	0'01	0'01
3	0'01	0'20	...	...	0'28	0'01	0'01	0'07	...	0'02	...	0'06
4	0'02	0'34	...	0'11	0'29	...	...	0'01	...	...	...	0'12
5	...	0'31	...	0'12	0'17	...	1'22	...	...	...	0'10	0'09
6	0'01	0'68	0'10	...	...	0'01	0'17	0'06	0'01	...	1'00	0'19
7	0'01	0'39	0'16	...	0'26	...	...	..	...	...	...	0'01
8	0'30	0'09	0'27	0'01	...	...	...	...	...	0'02	...	0'01
9	0'21	0'06	0'58	0'10	...	...	...	...	...	...	...	0'67
10	0'63	0'25	0'02	...	...	...	...	...	0'18	0'15	0'20	0'08
11	0'06	0'22	...	0'16	0'06	...	...	0'18	...	2'24	1'06	0'50
12	..	0'01	...	0'48	0'03	...	..	0'05	...	0'01	0'96	0'55
13	0'25	0'25	...	0'40	...	...	...	...	...	..	0'10	...
14	0'06	0'23	0'06	0'06	...	...	...	0'15	..	...	...	0.26
15	0'49	0'02	0'13	0'16	0'25	...	...	0'01	...	...	...	0'18
16	...	0'44	0'04	...	...	...	...	0'04	...	...	...	0'40
17	0'16	0'23	0'02	0'01	0'07	...	...	0'06	...	...	...	...
18	0'16	0'22	...	...	0'18	...	...	0'83	0'01	0'34	...	0'12
19	0'01	0'30	...	...	0'01	...	...	0'27	...	0'18	...	0'05
20	...	0'70	0 02	0'06	...	0'25	0'68	0'45	...	0'18	...	0'45
21	...	0'13	...	0'10	...	...	0'07	0'45	...	...	...	0'05
22	...	0'08	...	.	...	...	0'03	...	...	0'01	...	0'10
23	0'14	0'27	...	0'11	...	...	0'25	...	...	...	0'26	0'25
24	...	...	...	1'03	...	0'38	0'20	0'04	0'05	...	0'15	0'08
25	...	0'06	...	0'05	...	...	0'36	0'71	0'04	...	0'11	0'01
26	...	...	...	...	...	...	...	0'66	0'17	...	0'02	0'11
27	...	0'04	0'12	0'29	0'04	0'25	0'08	0'06	...	...	0'04	...
28	0'20s	0'23	...	0'06	0'05	0'28	0'33	0'83	0'18	...	0'05	0'20
29	...	...	...	0'05	0'32	0'22	...	0'25	0'01	...	...	0'13
30	0'05	...	..	...	0'44	0'06	0'15	0'04	...	...	...	0'01
31	0'14	...	...	...	0'18	...	0'06	...	...	1'12	...	0'13
	3'43	6'12	3'20	2'49	2'64	1'51	3'81	5'32	0'91	2'69	4'23	4'82
on d'ys	20	26	13	19	16	9	15	21	10	12	14	27

Total for year, 41'17, on 202 days.

Above Sea Level 209 feet.

INCHES OF RAINFALL AT BROUGHTON GRANGE, COCKERMOUTH, FOR 1910 AND PREVIOUS YEARS.

G. S. WILSON.

	1901		1902		1903		1904		1905		1906		1907		1908		1909		1910		Greatest fall in 24 hours		Average 33 years, 1873 to 1904.	
	Rain	On days	Rain	On days	Rain	On days	Rain	On days	Rain	On days	Rain	On days	Rain	On days	Rain	On days	Rain	On days	Rain	On days	Inches	Date	Rain	Inches
January	2.68	17	3.15	19	4.32	15	3.70	22	1.25	17	5.67	25	1.45	14	4.34	18	3.38	19	3.43	20	0.63	10	3.489	
February	1.66	11	0.84	10	5.18	21	3.05	19	2.54	19	2.66	17	2.00	11	2.92	19	2.35	8	6.12	26	0.70	20	2.757	
March	1.91	13	2.12	22	6.61	28	2.86	16	3.25	23	2.40	15	4.24	18	3.69	18	3.67	19	3.20	13	1.50	1	2.780	
April	3.01	17	1.55	13	1.55	15	3.03	21	3.54	19	1.42	10	2.54	13	1.53	16	2.83	16	2.49	19	0.48	12	2.018	
May	1.56	11	2.69	24	2.63	19	2.80	21	2.67	11	4.77	25	3.98	19	2.70	20	1.73	14	2.64	16	0.44	30	2.400	
June	2.50	12	1.57	14	1.29	9	1.44	13	1.89	5	1.75	9	5.54	25	2.93	14	2.53	14	1.51	9	0.38	24	2.515	
July	0.88	9	3.47	17	4.52	20	2.77	10	2.61	13	2.50	18	1.88	14	3.62	17	6.98	23	3.81	15	1.22	5	3.382	
August	4.28	19	2.86	15	5.54	25	4.07	21	3.26	19	5.59	21	4.64	22	4.70	19	2.61	18	5.32	21	0.83	18	4.487	
September	2.45	15	1.61	16	5.15	19	2.38	11	3.18	18	1.37	6	0.36	4	4.72	24	2.42	13	0.91	10	0.23	2	4.162	
October	5.93	22	3.32	17	8.75	30	2.52	15	2.67	12	5.95	25	7.08	25	1.75	11	8.66	22	2.69	12	1.22	31	4.480	
November	4.87	12	2.25	17	3.79	21	3.73	19	3.96	17	4.17	19	4.37	16	3.27	17	2.11	14	4.23	14	1.06	11	4.227	
December	5.06	21	3.77	16	3.50	16	4.87	18	3.11	18	3.37	20	5.89	20	3.30	23	6.78	16	4.82	27	0.67	9	4.023	
	36.79	179	29.20	200	52.83	238	37.22	206	33.93	191	41.62	210	43.97	201	39.47	216	46.05	196	41.17	202			40.720	

Rural District of Cockermouth.

Annual Report of the Medical Officer of Health for the Year 1910,
on the Administration of the Factory and Workshop Act, 1901,
in connection with

FACTORIES, WORKSHOPS, &C.

INSPECTIONS.

Premises.	Number of—	
	Inspections.	Written Notices.
Factories	31	1
Workshops	56	1
Workplaces	25	
Total	112	2

DEFECTS FOUND.

Want of Cleanliness	1
Unsuitable Sanitary Accommodation	1
Total	2

REGISTERED WORKSHOPS.

Iron Furnaces	1
Brick Works	5
Linen and Thread Mills	1
Flour Mills	12
Saw Mills	6
Shoemakers and Cloggers	17
Joiners and Carpenters	28
Blacksmiths	15
Dressmakers	11
Tailors	7
Breadmakers	9
Tanners	1
Laundry	2
Bicycle Works	1
Pit Banks	5
Total on Register at end of year	121

JOHN PENNY, D.Sc., M.B.,

February, 1911.

Medical Officer of Health.

TABLE I.—Cockermouth Rural District.
Vital Statistics of whole district during 1910 and previous years.

YEAR.	Popula- tion esti- mated to Middle of each year	BIRTHS.		Total deaths registered in the district				Total Deaths in Public Insti- tutions.	Deaths of		Nett Deaths at all ages belonging to the District.	
		Number.	Rate.*	UND'R 1 YEAR AGE		AT ALL AGES.			Non- residents registered in Public Insti- tutions in the Dis- trict.	Residents Regis- tered in Pub- lic Insti- tutions beyond the Dis- trict.		
				Number.	Rate per 1,000 Births reg'ster'd	Number	Rate.*					
1	2	3	4	5	6	7	8	9	10	11	12	13
1900	22513	617	27.4	69	111.8	290	12.9					
1901	21690	681	31.3	84	123.3	316	14.5					
1902	21690	616	28.3	76	123.3	292	13.4					
1903	21700	692	30.4	76	114.8	300	13.8					
1904	21800	646	29.6	88	136.2	293	13.6					
1905	22112	679	30.7	90	147.2	331	14.9					
1906	22112	641	28.9	77	120.1	297	13.4					
1907	22112	632	28.5	74	117.0	338	15.2	1		8	369	16.61
1908	22210	603	27.1	103	172.0	362	16.2	3	1	23	302	13.57
1909	22250	670	30.11	62	92.5	282	12.6		3			
Averages for years 1900-1909	22018	647	29.2	79	125	310	14.0					
1910	22250	600	26.96	66	110	333	14.96	4	1	18	350	15.73

* Rates in columns 4, 8, and 13, calculated per 1,000 of estimated population.

NOTE.—The deaths to be included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths to be included in column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere

Area of District in acres (exclusive of area covered by water) { 158,113'464

Total population at all ages ... 21,690 } At Census
 Number of inhabited houses ... 4,383 } of
 Average number of persons per house ... 4'9 } 1901

Institutions within the District receiving sick and infirm persons from outside the District.	Institutions outside the District receiving sick and infirm persons from the District.
The Ghyll Retreat (licensed under the Inebriates Acts), Buttermere.	Victoria Cottage Hospital, Maryport.
Isolation Hospital, Broughton Moor.	Union Workhouse, Cockermouth.
	The Nursing Home, Cockermouth.
	The Cumberland Infirmary, Carlisle.
	The County Asylum, Garlands.

Is the Union Workhouse within the District ? No.

TABLE III.—Cockermouth Rural District.

Cases of Infectious Disease notified during the Year 1910.

NOTIFIABLE DISEASE.	Cases notified in Whole District.						Total Cases notified in each locality.				No. of Cases removed to Hospital from each locality.				Total Cases removed to Hospital	
	At all Ages.	Ages.†—Years.					1	2	3	4	1	2	3	4		
		Under 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.										65 and upwards.
Smallpox	24	2	16	6		1	15		8						
Cholera	17	1	2	1	12	1	2	10	4						
Diphtheria (including Membranous croup)	190	82	86	13	4	1	13	80	96		8	28	48	84	
Erysipelas															
Scarlet fever															
Typhus fever															
Enteric fever	2		1		1			2							
Relapsing fever															
Continued fever															
Puerperal fever															
Plague															
TOTALS	233	85	105	20	17	1	3	30	92	108		8	28	48	84

Isolation Hospital (Name and Situation)—Isolation Hospital, Broughton Moor. Total available beds, 15.
 Number of Diseases that can be concurrently treated—Scarlet Fever only.

TABLE IV.—*Cockermouth Rural District*

Causes of, and Ages at, Death during Year 1910.

CAUSES OF DEATH.		Deaths in whole District at subjoined Ages.							Deaths in Localities (at all ages).				Deaths in Public Institutions.
		All ages.	Under 1.	1 and under 5	5 and under 15	15 and under 25	25 and under 65	65 and upwards	K.R.	C.R.	W.R.	M.R.	
I		2	3	4	5	6	7	8	9	10	11	12	
Small-pox	4
Measles		13	2	10	1	...	...	...	...	2	...	11
Scarlet fever		9	...	7	2	...	...	...	...	...	3	6
Whooping-cough		2	1	1	...	...	...	...	...	2	...	...
Diphtheria & membranous croup		2	...	1	1	...	...	...	1	1	...	...
Croup ... ..		...	...	...	...	...	...	...	...	...	...	...
Fever { Typhus ... ..		...	...	...	...	...	...	...	...	...	...	...
Enteric		1	...	...	...	...	1	...	...	...	1	...
Other continued ... ..		...	...	...	...	...	...	...	...	...	...	...
Epidemic Influenza ... ..		...	...	...	...	...	...	...	...	...	...	...
Cholera	4
Plague ... ..		...	...	...	...	...	...	...	...	...	...	...
Diarrhœa		5	4	1	...	...	...	...	...	...	2	3
Enteritis		10	2	4	...	1	2	1	...	2	3	5	
Gastritis		7	4	2	...	...	...	1	2	1	2	2
Puerperal fever ... ..		...	...	...	...	...	...	...	...	...	...	...
Erysipelas		2	...	...	...	...	1	1	...	1	...	1
Other septic diseases ... ..		...	...	...	...	...	...	...	...	...	...	...
Phthisis		23	...	...	3	3	14	3	6	6	5	6
Other tuberculous diseases		7	3	3	...	1	...	...	2	1	...	4
Cancer, malignant disease		19	7	12	3	5	6	5	4
Bronchitis		27	6	3	1	1	2	14	2	7	8	10	
Pneumonia		22	2	9	1	1	2	7	4	2	4	12	
Pleurisy ... ..		...	...	...	...	...	...	...	...	...	...	...
Other diseases of Respiratory organs		3	...	...	...	1	1	1	1	1	...	1
Alcoholism ... ..		...	...	...	...	...	...	...	...	...	...	...
Cirrhosis of liver		3	...	...	...	...	3	...	1	1	...	1
Venereal diseases ... ..		...	...	...	...	...	...	...	...	...	...	...
Premature birth		9	9	...	...	...	...	...	1	2	4	2
Diseases and accidents of parturition		2	1	...	...	...	1	...	...	1	1	...
Heart diseases		44	1	3	22	18	4	12	10	18	4
Accidents		8	...	1	2	2	3	...	1	2	1	4	
Suicides		3	...	...	...	...	3	...	...	1	2	...
All other causes		129	32	6	5	1	23	62	9	32	35	53	
All causes		350	66	48	17	14	85	120	37	82	87	144	4

TABLE V.—*Cockermouth Rural District.*

INFANTILE MORTALITY DURING THE YEAR 1910.

Deaths from stated Causes in Weeks and Months under One year of age.

CAUSE OF DEATH.		Under 1 Week.	1-2 Weeks	2-3 Weeks	3-4 Weeks	Total under 1 month	1-2 Months	2-3 Months	3-4 Months	4-5 Months	5-6 Months	6-7 Months	7-8 Months	8-9 Months	9-10 Months	10-11 Months	11-12 Months	Total Deaths under One Year.
Common Infectious Diseases.	Small-pox	...																
	Chicken-pox	...																
	Measles	...										1	1					2
	Scarlet Fever	...																
	Diphtheria : Croup	...																
	Whooping Cough	...								1								1
Diarrhoeal Diseases	Diarrhoea, all forms	...					1	1	1			1						4
	Enteritis (not Tuberculous)	...								1				1				2
	Gastritis, Gastro-intestinal Catarrh	...	1			1		1			1	1						4
Wasting Diseases.	Premature Birth	...	8	1		9												9
	Congenital Defects	...	5		1	6	1											7
	Injury at Birth	...	1			1												1
	Want of Breast-milk	...																
	Atrophy, Debility, Marasmus	...	3		1	4	1	2										7
Tuberculous Diseases	Tuberculous Meningitis	...											1	1				2
	Tuberculous Peritonitis :	...																
	Tabes Mesenterica	...													1			1
	Other Tuberculous Diseases	...																
Other Causes.	Erysipelas	...																
	Syphilis	...																
	Rickets	...																
	Meningitis (not Tuberculous)	...																
	Convulsions	...	1	2		3		1	2	1								7
	Bronchitis	...					1			1	1	2			1			6
	Laryngitis	...																
	Pneumonia	...								1					1			2
	Suffocation, overlying	...																
	Other Causes	...	2	2	1	5	2	1				2	1					11
All Causes	Certified	...	19	5	3	27	6	6	3	5	2	5	4	3	3			64
	Uncertified	...	2			2												2

Births in the year—legitimate 571
Do. illegitimate 29

Deaths in the year—legitimate infants 64
Do. illegitimate 2

Deaths from all Causes at all ages ... 350
Population, estimated to middle of 1910 ... 22250

TABLE VI.

Summary of work done through the Inspector of Nuisances in the Rural Sanitary District of Cockermouth, during the year ending 31st December, 1910.

RURAL DISTRICTS.		Nuisances reported in 1910 and not yet abated	Drains tested	Scarlet Fever cases removed to Hospital	Samples of water analysed	Samples of water condemned	Cowsheds on register	Inspections of Cowsheds in 1910.	No. of Slaughterhouses in district	No. of Inspections of Slaughterhouses and nuisances found.	Complaints of Nuisances received	No. of Inspections of Workshops	Privies & Ashpits built & repaired	Privies and Ashpits cleansed	Middens removed	Drains or Channels made or repaired	Drains or Channels cleansed	Other Nuisances abated	Houses enlarged	
Above Derwent	...	...	1	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	...
Allerby and Oughterside	...	2	...	...	1	1	4	...	2	...	...	...	...	15	...	1	1	...	...
Braithwaite	...	...	...	...	...	...	...	...	1	...	...	...	...	1	...	...	...	1	...
Borrowdale	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Blindbothel and Whinfell	...	...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	...
Brackenthwaite	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Brigham	...	2	...	...	...	...	6	...	...	...	...	...	...	26	1	1	...	1	...
Buttermere	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Bassenthwaite	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
Bewaldeth and Sunderland	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Blindcrake, Isel, and Redmain	...	...	...	4	1	...	...	...	...	...	...	...	1	...	...	...	1	1	...
Bothel and Threapland	...	2	...	...	1	1	...	...	1	...	...	...	1	...	1	4	2	...	...
Bridekirk and Dovenby	...	...	...	1	...	...	...	...	1	...	...	...	...	...	...	2	...	...	...
Broughton	...	3	1	...	...	...	1	...	3	1	...	...	...	17	...	2	5	4	...
Broughton Moor	...	3	...	2	1	1	3	...	...	...	...	...	...	46	...	...	2	...	...
Camerton and Ribton	...	...	...	7	...	...	2	...	...	...	...	...	...	6	...	1	...	...	...
Clifton, Great	...	2	...	12	...	...	4	...	2	...	...	...	...	74	1	...	...	...	...
Clifton, Little	...	2	...	1	...	...	2	...	...	...	...	...	...	6	...	1	...	...	...
Crosscanonby, Crosby and Villa	...	...	...	2	...	...	7	...	...	...	...	...	...	45	...	...	...	...	...
Dearham and Craika	...	2	...	26	...	...	4	...	2	...	...	...	5	23	...	3	...	7	...
Eaglesfield	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	...	1
Embleton, Wythop & Setmurthy	...	...	...	...	1	1	...	...	1	...	...	...	...	1	...	...	2	4	...
Flimby	...	4	...	17	...	...	6	...	1	...	...	...	...	51	...	5	12	11	...
Greysouthen	...	...	...	...	...	...	1	...	2	2	...	...	...	3	...	...	...	...	...
Gilcrux, Greengill, and Bullgill	...	1	...	...	...	...	2	...	...	...	...	...	1	4	...	1	1	...	...
Isel Old Park	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Lorton	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
Loweswater, Mosser, & Mockerkin	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...
Millbeck and Applethwaite	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Newlands	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Pardshaw, Dean, and Deanscales	...	2	...	...	1	1	...	...	...	...	...	...	...	...	...	1	2	2	...
Papcastle and Goat	...	...	...	...	...	...	2	...	1	...	...	...	...	4	...	1	2	...	...
Plumbland and Warthole	...	1	...	...	...	...	1	...	...	...	...	...	1	...	...	1	...	...	...
Parsonby and Arkleby	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	2	...	...	...
Seaton	...	9	...	3	...	...	7	...	2	...	...	...	1	9	2	...	2	1	...
Stainburn and Winscales	...	...	...	4	...	...	6	...	3	1	...	...	...	4	...	...	...	...	...
St. John's, Legburthwaite and Wythburn	...	...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	1	...	...
Thornthwaite	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1	...
Thackthwaite	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Tallantire	...	...	...	4	...	...	1	...	1	...	...	...	...	...	...	...	...	...	...
Ullock and Branthwaite	...	...	...	1	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...
Under Skiddaw	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	...
Workington Rural	...	...	...	...	...	...	4	...	...	...	...	...	...	1	...	1	...	...	...
TOTALS	...	35	2	85	7	6	70	147	25	46	23	11	2	10	338	5	32	33	34	1

TABLE VI—(continued).

RURAL DISTRICTS.		Houses sewered	No. of Houses	Ventilation improved	Structural Defects of houses repaired	Houses disinfected	No. of houses water supply improved	Houses with Overcrowding	New W.C.s or Privies converted into W.C.s.	Schools disinfected	Traps put in	Pigs removed
Above Derwent	...	...	...	...	...	1	...	...	...	...	...	...
Allerby & Oughterside	...	...	...	...	...	3	...	...	...	...	...	...
Braithwaite	...	...	...	...	...	...	...	...	...	...	...	...
Borrowdale	...	...	...	...	...	...	...	...	...	...	...	...
Blindbothel & Whinfell	...	...	...	...	...	...	1	...	...	...	...	...
Blackenthwaite	...	...	...	...	...	...	...	...	...	...	...	...
Brigham	...	...	...	...	...	...	...	...	...	...	...	...
Buttermere	...	...	...	...	...	...	...	...	...	...	...	...
Bassenthwaite	...	...	...	...	...	...	...	...	...	...	...	...
Bewaldeth and Sunderland	...	...	...	...	...	1	...	...	...	...	...	...
Blindcrake, Isel, and Redmain	...	...	...	...	...	4	2	...	...	1	...	...
Bothel and Threapland	...	...	...	...	...	1	...	...	...	...	2	3
Bridekirk & Dovenby	...	2	...	...	...	1	...	...	2	1	2	...
Broughton	...	...	...	1	...	1	...	...	...	...	...	...
Broughton Moor	...	...	...	...	...	2	...	...	1	...	...	...
Camerton and Ribton	...	...	...	...	...	11	...	...	...	...	...	...
Clifton, Great	...	...	...	...	...	50	10	...	...	3	...	...
Clifton, Little	...	...	...	...	...	7	...	...	...	...	...	...
Crosscanonby, Crosby and Villa	...	...	...	...	...	2	2	...	1	...	...	...
Dearham and Craika	...	...	...	7	...	35	2	1	...	1	1	...
Eaglesfield	...	...	...	...	...	...	...	...	...	...	...	...
Embleton, Wythop, & Setmurthy	...	...	...	1	...	7	6	...	2	1	...	...
Flimby	...	...	...	4	...	39	4	...	...	...	...	...
Greysouthen	...	...	...	...	...	1	...	...	...	1	...	...
Gilcrux, Greengill, & Bullgill	...	...	...	...	...	2	...	...	...	...	...	...
Isel Old Park	...	...	...	...	...	...	...	...	...	...	...	...
Lorton	...	...	...	...	...	...	...	...	...	1	...	...
Loweswater, Mosser, & Mockerkin	...	...	...	...	...	...	...	...	...	...	...	...
Millbeck & Applethwaite	...	...	...	...	...	...	...	...	...	...	...	...
Newlands	...	...	...	...	...	...	...	...	...	...	...	...
Pardshaw, Dean & Deanscales	...	...	...	1	...	...	...	...	...	...	...	...
Papcastle and Goat	...	...	...	1	...	...	...	...	...	...	...	...
Plumbland and Warthole	...	...	...	...	...	8	...	...	...	...	...	...
Parsonby and Arkleby	...	...	...	2	...	5	1	...	...	...	3	...
Seaton	...	...	...	2	...	4	...	...	62	...	80	...
Stainburn and Winscales	...	...	...	...	...	3	...	...	...	...	...	...
St. John's, Legburthwaite & Wythburn	...	...	...	...	...	1	...	...	...	...	...	...
Thornthwaite	...	...	...	...	...	...	...	...	...	...	...	...
Thackthwaite	...	...	...	...	...	...	...	...	...	...	...	...
Tallantire	...	...	2	...	...	2	...	...	...	...	...	...
Ullock and Branthwaite	...	...	...	...	...	1	...	...	...	...	...	...
Under Skiddaw	...	...	...	...	...	...	...	...	...	...	...	...
Workington Rural	...	...	...	...	...	...	...	...	...	...	...	...
TOTALS ...		2	2	19	102	28	1	68	9	88	3	

John Wm. Jackson,
Inspector of Nuisances.

Number of Nuisances abated by Statutory Notices

Peremptory " "

Verbal Notices

266

23

290

579

121

112

Factories and Workshops on the Register

Number of Inspections of Workshops

...

...

